

Abstract

Inaugural Poster Session
Hispanic Neuropsychological Society Conference 2019

Saturday, February 23, 2019 5:00 pm – 6:00 pm

GENERAL STUDIES

A-13

Performance of Young Children in Rural Guatemala on the Mullen Scales of Early Learning

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Objective: The literature supports using tests developed in high-income countries to assess children in low and lower-middle income countries (LMICs) when carefully translated, adapted, and applied (Holding et al., 2018; Mitchell et al., 2017). Research has shown the Mullen Scales of Early Learning (MSEL) to have adequate validity and sensitivity when used in LMICs (Bangirana et al., 2014; Koura et al., 2013), as well as equivalency to the American normative sample in lower risk populations (Bornman et al., 2010). Here, we describe the pattern of MSEL results in rural Guatemala. **Participants and Method:** Children (n = 842; M enrollment age = 15.9 months; range 0-5 years) enrolled in an observational study of postnatal Zika exposure in rural Guatemala were administered an adapted and translated version of the MSEL (Connery et al., in press). To date, 352 children completed one, 393 children completed two, and 97 children completed three MSELs, for a total of 1,429 administrations. **Results:** MSEL composite scores were similar to the American normative sample in children <12 months (M = 93.3, SD = 11.1), but lower for children ages 1-5 years (mean = 71.1, SD = 15.1, p < 0.0001). Moreover, lower scores were observed in children ages 1-5 years for all MSEL subscales, with the largest differences observed in receptive language (<12 years: mean = 47.8, SD = 7.1; 1-5 years: mean = 35.1, SD = 10.0, p < 0.0001). **Conclusions:** Results are consistent with research that demonstrates a widening gap in test performance over time between children from higher and lower risk communities (Fernald et al., 2011; Paxson et al., 2005; Schady et al., 2015). Although findings are not meant to diagnose individual children, they highlight population changes in neurodevelopmental skills and the need for a better understanding of developmental patterns in LMICs. Future analyses will evaluate the impact of developmental risk factors over time and the performance of the MSEL in this population.

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